

## TESTER, GROUND RESISTANCE

SCAT 4261  
TAMCN A7057

1. GENERAL This procurement requires a clamp-on type ground resistance tester.
2. CLASSIFICATION The tester shall meet the requirements of MIL-PRF-28800F, class 2, for Navy shipboard, submarine and shore applications; as well as Marine Corps Field Applications.
3. OPERATIONAL REQUIREMENTS The equipment shall be capable of measuring system ground resistance on multi-grounded systems having a ground conductor size of 23 mm or less in diameter.

### 3.1 Electrical Specifications:

Measurement Range	Resolution	Accuracy
2 to 19 ohms	0.1 ohm	+/- (2.5% +2 LSD)
20 to 199 ohms	1 ohm	+/- (3% + 2 LSD)
200 to 299 ohms	10 ohms	+/- (5% + 2 LSD)
300 to 500 ohms	10 ohms	+/- (10% + 2 LSD)

3.2 Display Resolution: 3-1/2 Digits.

3.3 Temperature Coefficient: 5% of reading for temperature range of 0° to 30° C.

3.4 Controls and Connectors: All controls and connectors shall be designed for ease of use by an operator wearing safety gloves.

## 4. GENERAL REQUIREMENTS

4.1 Power Source: MIL-PRF-28800 dc internal power source requirements are invoked. The batteries shall be of a commercially available type and provide 8 hours of continuous operation before replacement. The nominal power source requirements are not invoked.

4.2 Weight: 1.0 kg (2.2 lb.) maximum, excluding the transit case and any accessories.

4.3 Dimensions: 4,740 cm<sup>3</sup> maximum

4.4 Lithium Batteries: Per MIL-PRF-28800, lithium batteries are prohibited without prior authorization. A request for approval for the use of lithium batteries, including those encapsulated in integrated circuits, shall be submitted to the procuring activity at the time of submission of proposals. Approval shall apply only to the specific model proposed.

4.5 Transit Case: The ground tester shall be supplied with a case that has provisions for the unit and stowage of accessories and protection from shock, vibration, and environmental conditions as would be encountered during transport.

- 4.5.1 Identification Plate (ID): The transit case shall include a metal ID plate with the following information:
- NOMENCLATURE: TEST SET: GROUND
  - MODEL NUMBER
  - MANUFACTURE CAGE NUMBER
  - NSN
  - CONTRACT NUMBER
- 4.6 Accessories: The analyzer shall be supplied with all leads, cables, adapters, terminations and any other accessories necessary for its full use.
- 4.7 Calibration Interval: The calibration interval shall be 12 months minimum as in accordance with MIL-PRF-28800F.
- 4.8 Technical manual: Technical manuals shall be conformed to standard MIL-PRF-28800F Manuals must be broken into separate manuals; Basic Operations Manual and Service manual. Service manual shall be provided with all three levels of maintenance; unit operational verification, module level, and component level. Technical manuals shall be provided in both printed and electronic formats. The printed format shall be otherwise normally provided. The electronic format shall consist of the installation programs for the latest version of Adobe Acrobat for all computer platforms for which Acrobat is available and the technical manual in an electronic form that is readable through use of the Adobe Acrobat application.
- 4.9 Year 2000 Compliance: The manufacturer shall certify that the ground resistance tester is not susceptible to malfunction as a result of date/time functions associated with the calendar year 2000 or later.
- 4.10 The tester shall include a label that includes the manufacturer, model number, and serial number at a minimum.